In the Claims

1. (currently amended) A probe for the excitation of a sample to produce an acoustic signal and for analysis of the signal, comprising:

an excitation source which provides a pulsed laser output;

an optical fibre having a central inner core, a concentric outer core and an outer cladding, the pulsed laser output being supplied to the outer core at a first end of the optical fibre, the second end of the optical fibre being provided with [[a]] an interferometer film which is substantially transparent to the laser pulses, [[a]] said acoustic signal produced in the sample modulating the thickness of the film; and

a light source and detector assembly which provides an interferometer signal to the inner core at the first end of the fibre and detects the modulated reflected signal received from the inner core.

2. (currently amended) A probe as claimed in claim 1, wherein the inner core ~~defines~~ is a single mode fibre.

3. (original) A probe as claimed in claim 2, wherein the diameter of the inner core is less than 10μm.

4. (previously presented) A probe as claimed in claim 1, wherein the outer diameter of the outer core is approximately 250μm.

5. (previously presented) A probe as claimed in claim 1, wherein the interferometer film is butted against the second end of the fibre.

6. (previously presented) Medical examination equipment for characterising biological tissue comprising a probe as claimed in claim 1 and means for displaying the detected modulated reflected signal.